

**Vishay Spectrol** 

### 7/8" (22mm) Conductive Plastic Potentiometer



**Note:** The color of this product is changing to blue, during the internal period you may recieve either black or blue.

### FEATURES

- 7/8" Diameter Single Turn
- Compact Size, Advanced Design Technology
- Offers a Cost Effective Solution to your Potentiometer Requirements

ELECTRICAL SPECIFICATIONS		
PARAMETER		
Resistance	Standard range,	1KΩ to 50KΩ
Tolerance	STANDARD ± 20%	SPECIAL TO ± 10%
Linearity (Independent)	STANDARD ± 2.0%	
Output Smoothness	0.1% maximum	
TCR	± 600ppm/°C maximum	
Power Rating	1.0 watt at 70°C Derate to 0 watt at 125°C	
Electrical Travel	340° ± 3°	
End Voltage	0.5% maximum	
Dielectric Withstanding Voltage	1,000V <sub>F</sub>	RMS, 60Hz
Insulation Resistance	1000MΩ	, 500VDC

MECHANICAL SPECIFICATIONS		
PARAMETER		
Rotation	360° continuous (optional mechanical stops 340° ± 3°)	
Mounting	3/8 - 32 UNEF - 2A	
Operating Torque Maximum	Starting and running 3.68mNm (0.5 oz - in)	
Shaft Tolerance Maximum Runout End Play Radial Play	0.13mm (0.05 in) 0.25mm (0.010 in) 0.13mm (0.005 in)	
Weight	17.5gms (0.62 oz)	

RDERING INFORMATION						
357		0	3	0 P 22	x	x
MODEL		FEATURES	RT & INDEPENDENT LINEARITY	SHAFT TYPE	STANDAR	D VALUES
					2	2
	0	Non turn pin &	<b>0</b> = 20% Rt Tol., 2%	Shaft diameter - <b>0</b> = 6.0 mm	RES CODE	VALUE
		continuous rotation	<b>1</b> = 20% Rt Tol., 1%	or <b>1</b> = 6.35 (1/4")	102	1K
	1	No non turn pin &	2 = 10% Rt Tol., 2%	Shaft type - $P = plain S = slotted$	202	2K
		continuous rotation	<b>3</b> = 10% Rt Tol., 1%	FMF (from Mounting face)	502	5K
	2	Non turn pin, with stops		Range from 12mm to	103	10K
		on rotation		75mm in 1mm increments	203	20K
	3	No non turn pin with stops on rotation			503	50K

Example: 357 - 0 - 1 - 0P22 - XXX

Document Number: 57059 Revision 09-Jan-04

# Model 357

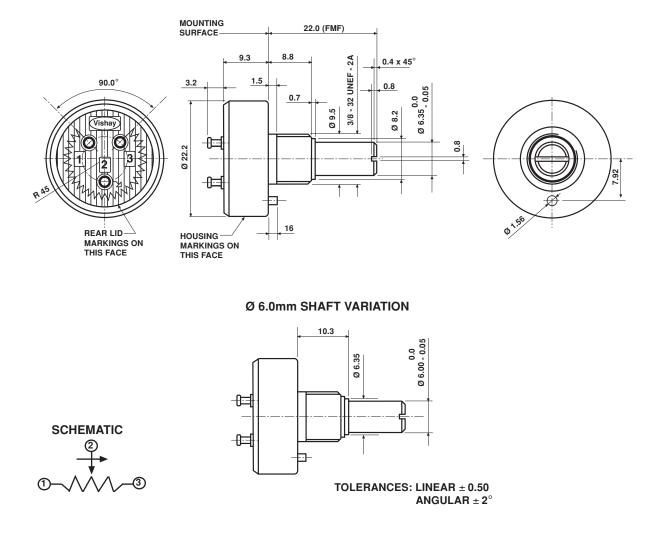
Vishay Spectrol

7/8" (22mm) Conductive Plastic Potentiometer



#### **DIMENSIONS** in millimeters

#### Ø 6.35mm SHAFT VERSION



ENVIRONMENTAL S	PECIFICATIONS
Vibration	15g, 10 to 2,000Hz
Shock	50g
Load Life	1000 hours
Storage Temperature Range	- 55°C to + 125 °C
Rotational Life (Electrical)	5,000,000 Shaft Revolutions
Materials:	
Housing:	Thermoplastic Housing
Bushing:	Brass, nickel plated
Rear Lid:	Alumina
Shaft:	Stainless steel
Terminals:	Turret type, solder plated
Bushing Mount Hardware	
Lockwasher Internal Tooth:	Steel, nickel plated
Panel Nut:	Brass, nickel plated

MARKING		
Unit Identification	Manufacturer's name and model number, resistance value and tolerance, linearity specification date code and terminal identification	

RESISTANCE VALUES		
Ohms	1K, 2K, 5K, 10K, 20K, 50K	

www.vishay.com 2



Vishay

# Notice

Specifications of the products displayed herein are subject to change without notice. Vishay Intertechnology, Inc., or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Vishay's terms and conditions of sale for such products, Vishay assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of Vishay products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Vishay for any damages resulting from such improper use or sale.